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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/705,470

11/10/2003

Robert L. Fair

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CESARI AND MCKENNA, LLP  
88 BLACK FALCON AVENUE  
BOSTON, MA 02210

EXAMINER

ELAND, SHAWN

ART UNIT

PAPER NUMBER

2188

MAIL DATE

DELIVERY MODE

04/29/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/705,470	<b>Applicant(s)</b> FAIR ET AL.	
	<b>Examiner</b> SHAWN ELAND	<b>Art Unit</b> 2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11, 13-19, 22-26 and 28-62 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-11, 13-19, 22-26 and 28-62 is/are allowed.
- 6) ☒ Claim(s) 48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/19/09 has been entered.

### ***Status of Claims***

Claims 1 – 11, 13 – 19, 22 – 26, 28 – 62 are pending in the Application.

Claims 1, 11, 22, 32, 38 have been amended.

Claims 12, 20 – 21, & 27 are cancelled.

Claims 50 – 62 are new.

Claim 48 is rejected.

Claims 1 - 11, 13 – 19, 22 – 26, 28 – 47, & 49 – 62 are allowed.

### ***Response to Amendments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

***Request for Examiner Interview***

Applicant requested a telephonic interview with the Examiner. However, there was already an Interview granted on January 26<sup>th</sup>, during which the Examiner and the Applicant agreed on the new amendments that were made for this action to overcome the prior art of record. Nonetheless, the Examiner called the Applicant stating in a voice mail that he would be available for an interview, if needed, but that the Applicant need not call if he felt it was superfluous. As of this date there was no return call from the Applicant.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Hitz** (US Patent 5,819,292), in view of **Bush** (US Patent 5,790,7781).

In regard to claim 48, Hitz teaches:

**receiving a write operation, the write operation identifying a file for the write operation** (Hitz's invention is directed to managing changes to a file system. In his disclosure, Hitz describes a Write Anywhere File-System Layout (WAFL) directed to writing new data (i.e. files) to the file system (i.e. storage system of claim 22). The files can write new inode files to the file system – col. 4, lines 6-32);

**creating a data buffer associated with the write operation** (referring to Fig. 10, when a new incore inode is created (1010A), an area is allocated to the inode in order to store information, a WAFL buffer structure (1010B), a set of pointers (1010C), and an on-disk inode (1010D). The pointers point to the newly created indirect WAFL buffers (1020) – col. 7, lines 5-41). Note the area needed to store these elements is created (i.e. allocated) as Hitz explicitly describes his invention as writing new data to unallocated blocks on a disk – see abstract; and

**writing a buffer check control structure to a raw data buffer associated with the data buffer** (again both the buffer data structure (1010B), and the pointers (1010C) are stored and associated with the inode, hence comprise the raw data buffer associated with the data buffer – col. 7, lines 5-41).

Though the Hitz discloses **storing consistency point numbers in the buffer check control structure**, he fails to further **teach determining if one or more uniquely identifying numbers (hereinafter magic numbers) are within the data buffer check control structure, wherein the magic numbers are used to uniquely identify the raw data buffer and to indicate that the data buffer needs to be checked for leakage** as recited in the instant claim.

Bush however teaches a system for simulated program execution error detection, which utilizes a data chunk (Fig. 17, element 1700), comprises a plurality of entries (i.e. collectively the magic number) which include a flag for determining if a memory buffer needs to be checked for leakage (e.g., reachable flag – element 1702), a chunk number, and a plurality of pointers used to uniquely identify buffers and control structures) – col. 28, l. 53 through col. 29, l. 28.

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It would have been obvious to one of ordinary skill in the art at the time of the invention for Hitz to further include Bush's system for simulated program execution error detection into his own system for maintaining consistency states in a file system. By doing so, Hitz would have a means of more quickly identifying, and correcting, programming errors that may occur in his system as taught by Bush in col. 3, ll. 1-17.

***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

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***Examiner's Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawn Eland whose telephone number is (571) 270-1029. The examiner can normally be reached on MO - TH, & every other FR.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571) 272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jasmine Song/  
Primary Examiner, Art Unit 2188

/Shawn Eland/  
Examiner, Art Unit 2188  
4/29/2009